

L 23321-66 EWT(1)/EEC(k)-2/T/EWA(h) IJP(c)

ACC NR: AT6008782

SOURCE CODE: UR/2657/65/000/014/0003/0019

AUTHOR: Nikolayevskiy, I. F., Perel'man, B. L., Skorik, K. I., Zotova, L. G.

ORG: none

TITLE: Low-temperature parameters of transistors 25-44

SOURCE: Poluprovodnikovyye pribory i ikh primeneniye; sbornik statey, no. 14, 1965, 3-19

TOPIC TAGS: germanium, transistor, parameter

ABSTRACT: Theoretical and experimental data regarding current amplification and input and output impedance of various types of the transistors in the low-temperature ranges are considered. An experimental liquid nitrogen refrigeration chamber is described; this chamber keeps the temperature of the medium within the low temperature range, down to -160C, with deviations not exceeding  $\pm 2C$ . The aim of the study was to fill the existing gap in the theoretical and experimental data on the low-frequency operation of germanium transistors in the low-temperature range down to -140C. Graphs and data presented in the original article on temperature dependences of transistor electric parameters are based on measurement results from 10--40 transistors of each type tested. Orig. art. has: 14 figures, 1 table, and 23 formulas. [KP]

SUB CODE: 09/

SUBM DATE: none/

ORIG REF: 003/

OTH REF: 002/

2

Card 1/1 ✓

UDC: 621.382.342.029.45

ACC NR: AR6035544

SOURCE CODE: UR/0269/66/000/010/0050/0051

AUTHOR: Gurtovenko, E. A.; Skorik, K. Ye.

TITLE: H $\alpha$ -electrophotometer for studying the spectrum of limb flares and prominences

SOURCE: Ref. zh. Astronomiya, Abs. 10.51.373

REF SOURCE: Solnechnyye dannyye, no. 12, 1965 (1966), 56-62

TOPIC TAGS: solar spectrum, solar limb, limb flare, limb prominence, limb flare measurement, limb prominence measurement

ABSTRACT: The instrument is designed to measure ray velocities and the profile of the H $\alpha$  line in the spectrum of any formation on the solar limb during its evolution. The output of the spectrograph is rigidly fitted with a photomultiplier using a searching guide. The guide is fixed in such a way that the H $\gamma$  line of the III order is in the field of the ocular micrometer, when the H $\alpha$  line of the II order reaches the photomultiplier. Following a rearrangement of the guide, the instrument may be used to register other lines. The output slot is 5" x 0.07 A, the dark current of the photomultiplier is 10<sup>-9</sup> at a voltage of 1880 v. Use is made of

UDC: 522.56

Card 1/2

40798

S/263/62/000/017/010/011

I011/I211

3.1000  
AUTHORS: Skorik, K. Ye., and Kheylo, E. S.

TITLE: A microphotometer with a photomultiplier

PERIODICAL: Referativnyy zhurnal. Otdeln'yy vypusk, Izmeritel'naya tekhnika, no. 17, 1962, 56, abstract 32.17.382. "Izv. Gl. astron. observ. AN USSR", 1961, v. 3, no. 2, 132-137

TEXT: A Markov type microphotometer was assembled at the Main astronomical observatory of the AS Ukr SSR. The mechanical part of the instrument was made according to the observatory drawings at the Physics institute of the AS Ukr SSR. This part and to a considerable extent the optical one were adopted from the double spectro jector. The photometer is mounted on two plates connected together by four stand. A screen with an opening on the optical axis of the objectives is fixed to the lower plate. The opening in the screen is covered by a disc with a set of circular diaphragms of 19.0-1.7 mm diameters. The ФЭУ-22 (FEU-22) photo-multiplier is placed under the screen. The stage which is moved by a vernier is placed on the upper plate. The light ray is collected by a condenser and the objective on the photometered area of the plate. This area is focused by the objective to the screen. A Fabri lens is placed in front of the photomultiplier to focus the image of the objective on its cathode. The recording part of the photometer consists of an illuminator, a Г3С-47 (GZS-47) galvanometer and a reading scale. Results of tests on the instrument operation

Card 1/2

A microphotometer with a photomultiplier

S/263/62/000/017/010/011  
I011/I211

stability and the accuracy of its reading are given. It is stated that the photometer does not introduce any systematic errors into the measurements and that the accuracy of measurement with the given photometer is not lower than with the MΦ-2 (MF-2) and MΦ-4 (MF-4) photometers. There are 5 figures.

[Abstracter's note: Complete translation.]

Card 2/2

SKOLIN, L.A.

RESEARCH REPORT

Study of the spectra of microseismic vibrations of various soils.  
Trudy Inst. fiz. Zem. no.33. Vop. inzh. seism. no.9:44-49 '64.  
(MIPA 17:12)

SKORIK, L.A.

Existence of a predominant period of earth vibrations  
during an earthquake. Trudy Inst. seism. stroi. i  
seism. 9:137-151 '61. (MIRA 15:11)  
(Seismology)

SKORIK, L.A.

Graphs of periodic repetitions during earthquakes of various intensities. Trudy Inst. fiz. Zem. 28 Vop. inzh. seism. no.8: 117-119 '63. (MIRA 16:11)

SKORIK, L.A.

Two types of seismic characteristics of soils. Dokl. AN Tadjh.  
SSR 6 no.4-15-19 '63. (MIRA 17:4)

1. Institut seysmostoykogo stroitel'stva i seysmologii.  
Predstavleno chlenom-korrespondentom AN Tadjhiskoy SSR  
V.A.Starikovym.



LAVROV, N.V., akademik, doktor tekhn. nauk. Prinimali uchastiye:  
KARBIVNICHIIY-KUZHNETSOV, V.B.; SKORIK, L.D.; PRIDATKIN,  
A.A.; SHIKIROV, K.Sh.; retsenzenti; BAKLITSKAYA, A.V., red.

[Fundamentals of the combustion of gaseous fuel] Osnovy go-  
reniya gazobraznogo topliva. Tashkent, Izd-vo AN UzSSR,  
1962. 417 p. (MIRA 18:6)

1. Sekretar' Otdeleniya tekhnicheskikh nauk AN UzbekSSR  
(for Lavrov).

SKORIK, M.

From the second pilot to the ship commander. Grazhd.av. 16 no.1:20-21  
Ja '59. (MIRA 12:3)

(Air pilots)

SKORIK, M.N., inzhener.

Power rates. Prom.energ. 11 no.9:9-10 S '56. (MLRA 9:11)

1. Energosbyt Kuybyshevenergo.  
(Electric utilities--Rates)

M

Country : USSR  
Category: Cultivated Plants. Grains.

Abstr Jour: RZhBiol., No 11, 1958, 48839

Author : Baran, M.U.; Skorik, M.Ya.  
Inst : Scientific Research Inst. of Agriculture and Animal  
Husbandry in the Western Districts of the Ukrainian  
SSR

Title : Cultivation of the Soil for Winter Crops on the Stubble  
of the Preceding Crops

Orig Pub: Inform. byul. Nauk.-dokl. in-t zemlerobstva i  
tvorimitsva zakhidn. rayoni v URSR, 1956, vyp. 1,  
5-7

Abstract: No abstract.

Card : 1/1

SKORIK, N.A. [Skoryk, M.IA]

Effect of the quality of wheat seeds on the length of the viable period.  
Pratsi Inst. agrobiol. AN URSR 4:50-58 '54. (MIRA 11:7)  
(Wheat) (Germination)

SKORIK, N.A. [Skoryk, M.IA]

Viability of seeds in different groups, species and forms of wheat.  
Pratsi Inst. agrobiol. AN URSR 7:48-58 '57. (MIRA 11:7)  
(Wheat) (Germination)

SOV/137-58-11-22216

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 54 (USSR)

AUTHORS: Chupakhina, R. A., Skorik, N. A., Serebrennikov, V. V.

TITLE: Separation of Rare-earth Elements Into Ion-exchange Resins by Means of the Complex Compounds of Sodium Versenate and the Heavy Metals (Razdeleniye redkozemel'nykh elementov na ionoobmennyykh smolakh s pomoshch'yu kompleksnykh soyedineniy trilonov "B" i tyazhelykh metallov)

PERIODICAL: Dokl. 7-y Nauchn. konferentsii, posvyashch. 40-letiyu Velikoy Oktyabr'skoy sots. revolyutsii. Nr 2. Tomsk, Tomskiy un-ta, 1957, pp 169-170

ABSTRACT: A study is made of the possibility of separating  $\text{La}^{3+}$ ,  $\text{Pr}^{3+}$ , and  $\text{Nd}^{3+}$ , adsorbed on the ammonia form of the cation exchanger KU-2, by eluting solutions of complex acids of  $\text{Mg}^{2+}$ ,  $\text{Zn}^{2+}$ ,  $\text{Cd}^{2+}$ , and  $\text{Hg}^{2+}$  with  $\text{H}_4$  Enta. Experiments showed the pH of these complexes to provide no accurate and precise answer, for practical purposes, to the question of the processes whereby cation exchanger KU-2 separates the rare-earth elements. It is established that a solution of an  $\text{Mg}^{2+}$  acid with  $\text{H}_4$  Enta washes out all 3 elements. An 0.5%

Card 1/2

SOV/137-58-11-22216

Separation of Rare-earth Elements Into Ion-exchange Resins (cont.)

solution of Zn complex does not wash out  $\text{La}^{3+}$  at pH 2.92-4.62, but does wash out Pr and Nd at pH 4.62. A 1% solution of the Zn complex does separate these elements. Solutions of  $\text{Cd}^{2+}$  and  $\text{Hg}^{2+}$  complexes with  $\text{H}_4\text{Enta}$  at 4.0-4.1 pH washes out La in addition to Pr and Nd. A 1% solution of Cd complex separates Pr and Nd, but less effectively than does a Zn complex. A solution of the Hg complex appreciably elutes a mixture of Pr and Nd when the pH of the solution is reduced to 3.1.

L. P.

Card 2/2



CHUPAKHINA, R.A.; SKORIK, N.A.; SEREBRENNIKOV, V.V.

Separation of rare earth elements on ion-exchange resins by means of  
complex compounds of Trilon B and heavy metals. Izv.Sib.otd.AN SSSR  
no.9:101-106 '60. (MIRA 13:11)

(Rare earths) (Ion exchange)  
(Complex compounds)

ACCESSION NR: AP4039268

S/0078/64/009/006/1483/1485

AUTHOR: Skorik, N. A.; Serebrennikov, V. V.

TITLE: Basic citrates of yttrium, potassium and some rare earth elements

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 6, 1964, 1483-1485

TOPIC TAGS: citrate, double salt, yttrium salt, potassium salt, lanthanum salt, praseodymium salt, neodymium salt, samarium salt, gadolinium salt, terbium salt, dysprosium salt, ytterbium salt, rare earth metal

ABSTRACT: Citric acid solutions and citrates are widely used as elements in the separation of rare earth elements on ion-exchange resins. The state of yttrium and rare earth elements in citrate systems in a broad pH range represents both a theoretical and practical interest. This article describes basic potassium rare earth citrates and basic potassium yttrium citrate. To produce basic citrates a 0.1 N solution of KOH was added to the weighed sample of yttrium citrate or rare earth citrate in an amount sufficient to produce 1:1 ratio with the citrate. Here La, Pr and Na citrates dissolved upon heating while Sm, Gd, Y, Yb, Tb and Dy citrates dissolved without any heating. Upon addition of alcohol-ether (1:1)

Card

1/2

L 34505-65 EWT(m)/EWG(m)/EWR(j)/T/EWP(t)/EWP(s) Pc-4/Pad IJP(c) RDW/JD/HW  
 S/0078/65/010/001/0279/0281  
 ACCESSION NR: AP5002805

AUTHOR: Skorik, N. A. ; Serebrennikov, V. V.

TITLE: Compounds of certain rare earth elements with cobalt, cadmium and zinc complexonates

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 1, 1965, 279-281

TOPIC TAGS: rare earth cobalt complexonate, rare earth cadmium complexonate, rare earth zinc complexonate, ethylenediaminetetraacetic acid complex, thermal stability, solubility, rare earth

ABSTRACT: The following salts of the rare earth elements with complexonates were obtained:  $Ln_2 [MeY]_3 \cdot xH_2O$ , where  $Ln=La, Ce, Pr, Nd, Sm$  and  $Gd$ ,  $Me = Zn, Cd$  and  $Co^{2+}$ , and  $H_4Y =$  ethylenediaminetetraacetic acid. The solubilities of these salts in  $H_2O$  at  $25C$  were determined; the solubility of salts of one and the same rare earth element decreased in the order:  $Zn > Co^{2+} > Cd$ , and for lanthanides with one and the same divalent metal, the solubility changed according to the series  $Gd > Sm > Nd > Pr > Ce > La$ . Examination of the thermal stability showed

Card 1/2

L 34506-38

ACCESSION NR: AP5002805

that there was slight loss of water below 103C, the remaining water was lost at 103-170C, and the organic portion of the compounds decomposed at 300-400C. Upon electrolysis of aqueous solutions of the salts, the divalent metal was concentrated in the anodic compartment, indicating it remained in the structure of the acid complex. \ Orig. art. has: 2 tables and 2 figures.

ASSOCIATION: None

SUBMITTED: 20Nov63

ENCL: 00

SUB CODE: GC, IC

NR REF SOV: 004

OTHER: 003

Card 2/2

L 36699-65 EWP(j)/EWT(m)/EWP(b)/T/EWP(t) Pc-4 IJP(c) RM/JD/JG

ACCESSION NR: AP5005008

S/0078/65/010/002/0407/0409

21  
B

AUTHOR: Skorik, N. A.; Serebrennikov, V. V.

TITLE: Dependence of the solubility of the citrates of certain rare earth elements on the pH of the medium

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 2, 1965, 407-409

TOPIC TAGS: rare earth citrate, solubility, hydroxy citrate complex

ABSTRACT: The solubility of La, Pr, Nd, Gd, Er and Y citrates in (Na, H) perchlorate solutions in the 2-10.6 pH range at  $\mu = 0.1$  was determined. The solubility of these compounds decreased as pH increased from 2-5; minimum solubility was at pH 5-6.5, when the composition of the citrates in the liquid and solid phases was the same; the solubility then increased rapidly above this pH. The citrate complex was partially decomposed and hydrolysed to  $[H_nCit]^{3-n}$  below pH 5; the hydroxy citrate acid complex  $[Ln(OH)_nCit]^{n-}$  was formed at pH > 6.5. Orig. art. has: 2 tables and 1 figure

Card 1/2

L 36699-65

ACCESSION NR: AP5005008

ASSOCIATION: None

SUBMITTED: 04Jul63

ENCL: 00

SUB CODE: IC, GC

NR REF SOV: 006

OTHER: 003

Card 2/2

L 55909-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG  
 ACCESSION NR: AP5008481 S/0078/65/010/003/0653/0656

AUTHOR: Skorik, N. A.; Kumok, V.N.; Perov, E.I.; Avgustan, K.P.; Serebrennikov, V.V.

TITLE: Citrate complexes of rare earth elements in acid solutions

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 3, 1965, 653-656

TOPIC TAGS: citrate complex, citrate ion, rare earth element, rare earth element ion, solubility product, lanthanum citrate, praseodymium citrate, neodymium citrate

ABSTRACT: A determination of  $\beta_1$  and  $\beta_2$  stability constants of  $\text{LnCit}$  and  $\text{LnCit}_2^{3-}$  and of solubility products of  $\text{LnCit} \cdot n\text{H}_2\text{O}$  precipitates for  $\text{La}^{3+}$ ,  $\text{Pr}^{3+}$ , and  $\text{Nd}^{3+}$  was carried out at 0.10 ionic strength and 25°C to obtain quantitative data on ionic equilibrium. The citrate ion in the presence of excess lanthanum was determined by a specially developed method (by absorption of the  $\text{Cu}^{2+}$  citrate complexes) with an SF-4 spectrophotometer. Solubility curves of  $\text{LnCit} \cdot n\text{H}_2\text{O}$  as a function of pH, as well as solubility curves of  $\text{LaCit} \cdot 3\text{H}_2\text{O}$ ,  $\text{PrCit} \cdot 3.5\text{H}_2\text{O}$ , and  $\text{NdCit} \cdot 3.5\text{H}_2\text{O}$  in  $\text{NaClO}_4$  -  $\text{Na}_3\text{Cit}$  solutions at pH 6.7-7.4 and in  $\text{NaClO}_4$  -  $\text{La}(\text{ClO}_4)_3$  solutions at pH 5.7 have

Card 1/4

L 55909-65

ACCESSION NR: AP5008481

been reinvestigated. The results have been reduced to zero ionic strength and presented in Tables 1 and 2 of the Enclosure. Orig. art. has: 3 formulas and 2 tables.

ASSOCIATION: Kafedra neorganicheskoy khimii, Tomskiy gosudarstvennyy universitet im. V. V. Kuybysheva (Department of Inorganic Chemistry, Tomsk State University)

SUBMITTED: 16Sep63

ENCL: 02

SUB CODE: IC

NO REF SOV: 005

OTHER: 005

Card 2/4



SKORIK, N.A.; SEREBRENNIKOV, V.V.

Dependence of the solubility of citrates of some rare earth  
element on the pH of the medium. Zhur. neorg. khim. 10  
no.2:407-409 F '65. (MIRA 18:11)

1. Submitted July 4, 1963.

SKORIK, N.A.; KUMOK, V.D.; PEGOV, A.I.; AVDEYAN, K.P.; SEREBETNIKOV, V.V.

Citrate complex of rare-earth elements in acid solutions.

Zhur. neorg. khim. 10 no.3:653-656 Mr '65.

(MIRA 18:7)

1. Kafedra neorganicheskoy khimii Tomskogo gosudarstvennogo universiteta imeni V.V. Kuybysheva.

BALON, I.D., kand.tekhn.nauk; ROMANENKO, N.T., inzh.; YUPKO L.D., inzh.;  
BOLKUNOV, Ye.P., inzh.; TULUYEVSKAYA, T.A., inzh.; ASTAFUROV, P.I., inzh.;  
VOLOVIK, A.V., inzh. Prinsipalni uchastiy: BAKAYEV, A.A.; VOKHNIK, A.R.;  
KOLOS, V.D.; KAYSTRO N.P. [deceased]; LITVINENKO, V.I.; MAKARCHENKO, N.M.;  
ONOPRIYENKO, V.P.; PALAGUTA, V.P.; PIKA, V.S.; RAGIN, B.I.; ROMANCHENKO,  
Ye.I.; SAYENKO, S.D.; STOLYAR, V.V.; SKORIK, N.M.; TOROPENKO, P.D.

Characteristics of making ferromanganese in large capacity blast furnaces  
and the effect of slag conditions on basic technical and economic indices.  
Stal' 23 no.12:1069-1073 D '63. (MIRA 17:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov i zavod "Zapo-  
rozhtal'".

8 (0) --

SOV/112-57-5-9791

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 5, p 21 (USSR)

AUTHOR: Skorik, N. S.

TITLE: Adhesive Polyvinyl-Chloride Tape for Insulating the Ends of Electric Conductors (Lipkaya polikhlorvinilovaya lenta dlya izolyatsii kontsov provodov)

PERIODICAL: Inform.-tekhn. sb. M-vo elektrotekhn. prom-sti SSSR, 1955, Nr 76, pp 23-24

ABSTRACT: Type PR and PRG rubber-insulated cotton-braided conductors are used for making connections and leads in electric machinery and equipment with class A insulation. In wiring work, conductor ends are additionally insulated for fixing the braiding edges and protection of rubber insulation. Varnished-cambric tape is conventionally used for this purpose with subsequent application of a parachute thread. At the KhEMZ factory, it was suggested that the varnished cambric be replaced by a polyvinyl-chloride tape as manufactured by the Ministry of Chemical Industry from specifications TU 2898-52. The

Card 1/2

SKOLIK, N.S., inzhener; LAVINCHUK, N.S., inzhener.

Practices of automatic temperature control in soaking pits. Stal'  
16 no.12:1106-1110 D '56. (MLRA 10:9)

1. Novo-Tazil'skiy metallurgicheskiy zavod.  
(Rolling mills) (Automatic control) (Heat--Transmission)

SKORIK, N.S., inzhener; TSUKERNIK, S.V., inzhener; LYSAKOVSKIY, G.I.,  
kandidat tekhnicheskikh nauk; ZVEZDKIN, V.N., inzhener; IZRAYELIT,  
G.B., inzhener; KOZYREV, N.A., kandidat tekhnicheskikh nauk;  
KULAKOVSKIY, V.B., kandidat tekhnicheskikh nauk; KARAMZIN, A.P.,  
inzhener; ALEKSEYEV, S.V., inzhener.

Electrical strength of stator winding insulation in 6-6.6 kv  
electric machines. Elek.sta. 27 no.4:38-51 Ap '56. (MLRA 9:8)

1. Khar'kovskiy elektromekhanicheskiy zavod (for TSukernik);
2. Donbassenergo (for Lysakovskiy); 3. Lenenergo (for Izrayelit);
4. LPI (for Kozyrev); 5. TSentral'naya nauchno-issledovatel'skaya  
elektrotekhnicheskaya laboratoriya (for Kulakovskiy); 6. Sverdlov-  
energo (for Karamzin); 7. Mosenergo. (for Alekseyev).

(Electric insulators and insulation--Testing)

SKORIK, N.S.

110-2-2/22

AUTHORS:

Skorik, N.S. (Engineer), Kholopova, Z.I. (Engineer) & Tsukernik, S.V. (Engineer).

TITLE:

On the electric strength of stator winding insulation on high voltage electrical machines. (K voprosu elektricheskoy prochnosti izolyatsii obmotok statora vysokovolnykh elektricheskikh mashin).

PERIODICAL:

Vestnik Promyshlennosti, 1958,

No.2, pp.7-12. (USSR)

ABSTRACT:

The electric strength of machine insulation is defined as the r.m.s. sinusoidal voltage which causes breakdown when applied for one minute. The present article refers only to 6 and 6.6 kV machines with continuous mica-tape compound-impregnated insulation. The mean breakdown voltage of coils has been given as 30 - 42 kV (the lower value relating to insulation of reduced thickness) and the minimum voltage to 22 - 23 kV. The great difference between the maximum and minimum values should be noted. Curves of the distribution of breakdown voltages of coil insulation are given in Fig.1. The scatter of results, though wide, is normally distributed and depends on the non-uniformity of the insulating material and its method of application. As usual in cases of this kind, the breakdown voltage depends on the size of the electrodes. Curves of the probability of breakdown of compound-impregnated mica-tape insulation of 6 - 6.6 kV stator windings are given in Fig.2. The dotted curves relate to values re-calculated to a constant electrode area by a formula which

Card  
1/3

110-2-2/22

On the electric strength of stator winding insulation on high voltage electrical machines.

is given. Because of the electrode area effect, the breakdown voltage for windings as a whole will be lower than that of individual coils; curves displaying this effect are given in Fig.3. The results confirm that the test voltages in the standard **ROCT**-183-55 for the insulation of 6-6.6 kV are correctly chosen and correspond to the actual insulation level. The disadvantages of using higher test voltages during manufacture are explained: machines made to the present test voltage level have proved reliable. The use of voltage tests for maintenance purposes is then discussed at length. The level of test voltage that can be considered non-destructive to the insulation is considered. Data about the probability of breakdown of new mica-tape, compound-impregnated insulation which has not been subjected to preliminary high-voltage testing are given in Fig.4. These curves are derived from tests on 160 coils made with reduced insulation in order to get a reasonable number of breakdowns. The results show that when the breakdown voltage level is high, compared with the value of the frequently applied test voltage, the latter makes little difference to the probability of breakdown. However, when the test voltage is nearer to the breakdown voltage there is a considerable increase in frequency of breakdown. These results show that frequent application for one minute of voltages of 13.2 and 21 kV would cause deterioration in insulation having a breakdown voltage 1.7 - 1.8 times higher than

Card 2/3



110-2-2/22

On the electric strength of stator winding insulation on high voltage electrical machines.

the test voltage. In general, application of a voltage much over 1.5 times the rated voltage will cause damage. This argument is developed at length and it is claimed that still lower maintenance test voltages, not greater than 1.2 - 1.4 rated voltage, should be used if insulation has been in service for a long time or is in bad condition. There are 4 figures, 4 literature references (all Russian).

SUBMITTED: September, 27, 1957.

ASSOCIATION: Khar'kov Electro-Mechanical Works (Khar'kovskiy elektromekhanicheskiy zavod)

AVAILABLE: Library of Congress.

Card 3/3.

SOV/110-58-7-2/21

AUTHOR: Skorik, N.S., Engineer, Kholopova, Z.I., Engineer,  
and Tsukernik, S.V., Engineer.

TITLE: On the nature of moisture absorption by continuous  
mica foil insulation of high-voltage machines  
(O kharaktere uvlazhneniya nepreryvnoy mikalentnoy  
izolyatsii vysokovol'tnykh mashin)

PERIODICAL: Vestnik Elektromyshlennosti, 1958, Nr 7 pp 6-12 (USSR)

ABSTRACT: It is important to know whether high-voltage elec-  
trical machines may be connected up without first  
drying-out. The answer to this question depends  
on the design of the windings, their insulation and  
degree of dampness. The following factors should  
be taken into account: the condition of the slot  
insulation and the end-windings; the possibility  
of break-down of insulation at joints and winding  
clamps with flash-over to the frame; the possibi-  
lity that intensive drying may damage the insulation.

Card 1/6

SOV/110-58-7-2/21

On the nature of moisture absorption by continuous  
mica foil insulation of high-voltage machines

This article is concerned only with high-voltage machines with coil-type windings having continuous mica foil compound-impregnated insulation for voltages up to 6.6 kV. Tests made at the Kharkov Electro-mechanical works show that the electrical properties of this kind of insulation remain good even after prolonged exposure to moisture. Break-down voltage data for damp and dry 6-kV insulation of this type is given in Table 1, which shows that exposure for 20 days to a relative humidity of 95 - 98% at 20°C reduces the break-down voltage by only 3.4% and 40 days exposure reduces it by 3.7%. Immersion in water for 204 days reduced the break-down voltage by 43% but the insulation was still

Card 2/6

SOV/110-58-7-2/21

On the nature of moisture absorption by continuous mica foil insulation of high-voltage machines

suitable for operation. Models were made up to determine the depth of water-penetration into mica-foil compound impregnated insulation. The amount of water absorbed on exposure was determined and the results are given in Fig. 2. It will be seen that the moisture absorption was much greater when the insulation was finished with an external covering of cotton tape, which, indeed, absorbed most of the moisture. The total quantity of moisture absorbed, the amount absorbed by the surface tape and the amount absorbed by the mica insulation are shown in Fig. 3. It will be seen that what little moisture is absorbed by the micafoil is mostly held in the outside layers. There is at present no satisfactory method of assessing the dampness of the insulation of electrical machines. Insulation-resistance measurements are commonly used for this purpose, but they cannot distinguish between surface- and volume-resistance and, therefore, cannot reveal whether moisture has penetrated deeply into the insulation. Data about changes in these two

Card 3/6

SOV/110-58-7-2/21

On the nature of moisture absorption by continuous mica foil insulation of high-voltage machines

resistances and in the total insulation resistance of 6-kV windings after exposure in a humidity chamber are given in Fig. 5. It will be seen that the surface resistance falls much more than the volume resistance and determines the insulation resistance figures for the machine. The main electrical characteristics of the insulation of the joints and winding clamps in the dry and the damp condition are given in Table 2. Specific values of surface- and volume-resistivity for damp high-voltage micafoil compound-impregnated insulation are given in Fig. 6, which also includes for comparison corresponding data for varnished cloth insulation. It is shown how reliance on insulation resistance measurements may lead to false conclusions about the degree of dampness of insulation. It is sometimes recommended to base assessments on the ratio

Card 4/6

On the nature of moisture absorption by continuous  
mica foil insulation of high-voltage machines

SOV/110/58-7-2/21

of the insulation resistance 60 secs after the application of voltage to that after 15 secs. This method is also unsatisfactory. In deciding whether a machine can be connected-up without drying, the important factor is the characteristics of the insulation of joints and winding clamps, including the possibility of surface flashover of this insulation. This question was studied by making surface-resistance and flashover tests on wet micafoil compounded 6-kV insulation treated with grey enamel. The tests were made on sections that had been in water for 2 and 25 days. The results are given in Table 3 and the results are discussed. It is concluded that there is no risk of surface flashover of insulation that has been immersed in water when double the working voltage (about 8 kV) is applied provided that the distance between the electrodes is greater than 50 mms, which it usually is in practice. On the basis of the work described, it is

Card 5/6

On the nature of moisture absorption by continuous mica foil insulation of high-voltage machines SOV/110/59-7-2/21

considered that to connect-up without preliminary drying-out is permissible in electrical machines of rated voltage up to 6.6 kV having stator coil windings insulated with compound-impregnated continuous micafoil insulation. This applies to machines which have been in a works or in stores or under normal transport conditions, and supposes that the machines have not been left unpacked out of doors for a long time and have not been in water. Before applying voltage the total insulation resistance of the cold stator winding should be checked and should not be less than 50 megohms. Load should be applied gradually at first. There are 3 tables and 6 figures.

Card 6/6

1. Insulation (Electric)--Absorptive properties      2. Electric machinery--Insulation

SOV/130-58-11-8/16

AUTHOR: Skorik, N.S.

TITLE: Improvement in the System and Equipment for the Automatic Regulation of Thermal Conditions in Open-Hearth Furnaces (Usovershenstvovaniye sistemy i apparatury avtomaticheskogo regulirovaniya teplovogo rezhima martenovskikh pechey)

PERIODICAL: Metallurg, 1958, Nr 11, pp 18 - 25 (USSR)

ABSTRACT: The author describes improvements effected at the Nizhniy Tagil metallurgical combine in the installed thermal-measurement system and the new automatic control systems devised. The furnaces are fired with a mixture of coke-oven and blast-furnace gases, oxygen and a carburizer being added to the flame. For measuring the checker temperature of the gas regenerators a special arrangement is used (Fig 1) which automatically cuts off the pyrometer-protecting air\* stream when the gas valve is open and lets in the air when the gas valve is closed: without this arrangement the air caused burning of the gas and thus distorted the temperature measurement. The pyrometer is referred to as "gas" in text but "air" makes sense.

Card 1/4



SOV/130-58-11-8/16

Improvement in the System and Equipment for the Automatic Regulation of Thermal Conditions in Open-Hearth Furnaces

sighted on the centre of the regenerator roof. For measuring furnace roof (basic) temperature water-cooled tubes for optical pyrometers were found unsatisfactory and replaced by tubes protected from the flame by clean compressed air. Workers of the "Uralmetallurgavtomatika" have developed an ultrasonic flowmeter for the carburizer in place of the unsatisfactory orifice types fitted. In the ultrasonic instrument (Fig 3) the difference in the lengths of the waves going with and against the flow is measured and used to determine the flow. An instrument of this type is now undergoing full-scale tests. For oxygen flow measurements a dry type of manometer is used in front of the valve so as to minimise pressure fluctuations. Each furnace is provided with a rapid immersion thermocouple, a rapid-action electronic potentiometer (mounted in the furnace control panel) and a light and sound signalling device. Pneumatically operated diaphragm valves are used to switch the oxygen flow in accordance with furnace reversals. The oxygen flow is remotely controlled (Fig 4). The combustion products are automatically distributed

Card 2/4

SOV/130-58-11-8/16

Improvement in the System and Equipment for the Automatic Regulation of Thermal Conditions in Open-Hearth Furnaces

between the gas and air regenerators with the aid of a valve in the flue duct from the latter. The valve automatically closes when the temperature of the top of the air checkers reaches a set value measured with an optical pyrometer (Fig 5). The valve moves at 50 mm in two seconds, followed by a pause of 45 seconds, which prevents sudden fluctuations; the valve opens when the checker temperature falls below 1100°C. Automatic firing control on Nr 14 furnace is effected with the aid of a computer (Fig 6). Quantity regulators keep the flows of blast-furnace and coke-oven gases constant. Liquid-fuel and oxygen flows are pre-set. The signals indicating the fuel flows are converted into air flows with allowance for the oxygen flow. At present the "Uralmetallurgavtomatika" organisation are co-operating with the Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki (All-Union Scientific Research Institute for Power Engineering in Metallurgy) on the development of an integrated automatic system for open-hearth thermal

Card 3/4

SOV/130-58-11-8/16

Improvement in the System and Equipment for the Automatic Regulation of Thermal Conditions in Open-Hearth Furnaces

control based on limiting temperatures for the inner surface of the furnace lining, the capacity of the flue system and the completeness of combustion of the fuel. The system includes: reversals, correction of combustion from the oxygen content of the flue gas, pressure in the furnace working space, distribution of combustion products between the regenerators, firing rate.

There are 6 figures.

ASSOCIATION: Nizhne-Tagil'skiy metallurgicheskiy kombinat (Nizhniy Tagil Metallurgical Combine)

Card 4/4

SKORIK, N.S.

Improving certain units of automatic control and regulation  
of blast furnaces. Metallurg 5 no.2:9-12 F '60.  
(MIRA 13:5)

1. Zamestitel' nachal'nika tsekha kontrol'no-izmeritel'nykh  
priborov Nizhne-Tagil'skogo metallurgicheskogo kombinata.  
(Blast furnaces) (Automatic control)

SKORIK, N.S.

Equipment for the semiautomatic lubrication of ingot molds. Metallurg  
5 no.11:17-19 N '60. (MIRA 13:10)

1. Zamestitel' nachal'nika kontrol'no-izmeritel'nykh priborov i  
avtomatiki Nezhne-Tagil'skogo metallurgicheskogo kombinata.  
(Ingot molds) (Metalworking lubricants)

SKORIK, N.S., inzh.; SHUTENKO, T.F., tekhnik

Automatic control of thermal conditions in runner brick drying in  
tunnel kilns. Mekh.i avtom.proizv. 14 no.12:9-11 D '60.

(MIRA 13:12)

(Fire bricks--Drying)

(Automatic control)

TURCHANINOV, V.S.; VALENBURGER, F.G.; SKORIK, N.S.; SHUTENKO, T.F.

Automation of the system of drying runner articles in a tunnel  
drier. Ogneupory 26 no.5:225-230 '61. (MIRA 14:6)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.  
(Kilns)  
(Refractory materials)

S/118/62/000/003/002/005  
D221/D302

AUTHOR: Skorik, N.S., Engineer  
TITLE: Program control of temperature in thermal furnaces  
PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 3,  
1962, 7 - 9

TEXT: The Nizhne-Tagil'skiy metallurgicheskiy kombinat (Nizhne-Tagil'sk Metallurgical Combine) has developed an automatic program control of furnace temperature, based on graphs of the regimes of heat treatment. The workers of KIP and automation designed special pneumatic transducers to operate in combination with standard blocs of a unified aggregate system (AUS). The pneumatic regulates the pressure at the outlet by a adjustable lever and in relation to the setting of the throttling device. The control system contains an electronic potentiometer, with a programming arrangement. The regulating bloc is a pressure booster. The bloc of remote control and the switch relay allow a transition from automatic to distance and manual operation. The temperature of the furnace is indicated by

Card 1/2



SKORIK, N.S.

Program regulation of temperature in the furnaces for thermal treatment. Analele metalurgie 16 no.4:160-165 Q-D '62.

SKORIK, N.S., inzh.

Automatic control of thermal conditions of open-hearth furnaces. Mekh.  
i avtom.proizv. 17 no.10:6-9 0 '63. (MIRA 17:1)

SKOLIK, P. Ya.

Dissertation defended for the degree of Doctor of Philological Sciences  
at the Institute of Linguistics 1962

"Grammar of the Chukotsk Language. Part I. Phonetics and Morphology  
of Named Parts of Speech."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

MIKHAYLOV, V.V.; SKORIK, V.A. (Moskva)

Mechanism of the development of paralysis in cold-blood animals  
(frogs) in experimental botulism. Pat. fiziol. i eksp. terap. 3  
no.3:56-59 My-Je '59. (MIRA 12:7)

1. Iz kafedry patologicheskoy fiziologii (zav. - chlen-korrespondent  
AMN SSSR prof. A.D. Ado) II Moskovskogo meditsinskogo instituta imeni  
N.I. Pirogova.

(CLOSTRIDIUM BOTULINUM,  
toxin inducing paralysis in frogs (Rus))

(PARALYSIS, exper.

Clostridium botulinum toxin induced in frogs (Rus))

SKORIK, V.A.

Detection of intermediate antigens in the nerve tissue of animals infected with herpes virus. Zhur.mikrobiol., epid. i ~~immun.~~ 32  
no.11:126-130 N '61. (MIRA 14:11)

1. Iz Instituta virusologii imeni D.I.Ivanovskogo AMN SSSR.  
(HERPES) (ANTIGENS AND ANTIBODIES)  
(VIRUS DISEASES)

SKORIK, V.A.

Studying the antigenic properties of nervous tissue by the use of the complement fixation reaction in experimental herpetic infection. Vop. virus. 7 no.2:245 Mr-Ap '62. (MIRA 15:5)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.  
(HERPES) (ANTIGENS AND ANTIBODIES) (BRAIN)

L 46158-65 ENT(m)/EPA(w)-2/EWA(m)-2 Pt-7/Pab-10 LJP(c) OS

ACCESSION NR: AT5007923

S/0000/64/000/000/0355/0357

AUTHOR: Ado, Yu. M.; Belovintsev, K. A.; Belyak, A. Ya.; Bessonov, Ye. G.;  
Dem'yanovskiy, O. B.; Skorik, V. A.; Cherenkov, P. A.; Shirchenko, V. S.

TITLE: Storage of particles in a synchrotron 19

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963. Trudy.  
Moscow, Atomizdat, 1964, 355-357

TOPIC TAGS: high energy accelerator, charged particle beam, particle physics,  
 synchrotron

ABSTRACT: Synchrotron-type accelerators of several 100 Mev and higher can be employed for particle storage [Yu. M. Ado, "Atomnaya Energiya, 12, 54 (1962)]. In the case of simultaneous storage of electrons and positrons in an accelerator, one can obtain colliding electron-positron beams. In order for a synchrotron to operate in the storage state, the constant component of the driving magnetic field must be larger than the amplitude of the variable component. In particular, if the variable component is a sinusoidal function of time, the driving magnetic field  $H$  must have a specified shape. In this case, the accelerating hf potential is step-shaped.

Cord 1/4

L 46158-55

ACCESSION NR: AT5007923

i.e. remains switched on continuously in contrast to the synchrotron's operation in the usual state. The injection of particles is effected at moments of time  $t_1, t_2, t_3, \dots$ , which correspond to intersections of the ascending curve  $H$ -versus- $t$  with the constant ordinate  $H_1$ . The particles captured in the synchrotron state of the storage device, which are accelerated during the rising portion of the magnetic field  $H$  and slowed down when the magnetic field is decreasing, remain in the accelerator chamber for a period that is determined mainly by the scattering processes and by the bremsstrahlung on the atoms of the residual gas. During each period of the driving magnetic field  $H$  close to maximum  $H$  there exists considerable radiation damping of the amplitudes of betatron and synchrotron oscillations. As a result, the phase volume occupied by the particles decreases. This permits the onset of amplitude modulation of the specified hf-potential without loss of the particles captured earlier. In this case, the injection of particles will proceed into the phase space between the separatrices which are defined by the amplitudes of hf-potential  $U$  (maximum step value) and  $U - \Delta U$  (modulation decrement due to  $H$  being less than  $H_1$  for the brief periods just before  $t_1, t_2, t_3, \dots$ ). The admissible depth of modulation  $\Delta H$  is larger the larger the magnitude of radiation damping of the oscillations. The effectiveness of the injection into the synchrotron state of storage during onset of amplitude modulation of the hf-potential is ten times the effectiveness of injection directly into the steady-state separatrix. In the case

Card 2/4



I 46158-65

ACCESSION NR: AT5007923

of particle storage in a synchrotron, injection is effected into the variable magnetic field during the low energy of the injected particles which is typical for the given accelerator. Consequently the problem of particle injection is essentially simplified in comparison with injection into storage rings. Moreover, the small injection energy simplifies the problem of obtaining positrons. These properties permit attainment of a comparatively high rate of storage and thus a lowering of the requirements made on the degree of vacuum. To verify the possibility in principle of realizing the method of particle storage in a synchrotron, experiments were carried out on a 280-Mev synchrotron under specific conditions of particle energy (170 Mev for maximum  $H$  and 7 Mev for minimum  $H$ ), amplitude  $U$ , of hf-potential (1.8 kv), modulation depth  $\Delta U$  (0.36 kv), rate of growth of driving magnetic field at moment of injection ( $1.5 \cdot 10^5$  oersteds/sec), pressure of residual gas in vacuum chamber ( $5 \cdot 10^{-6}$  mm/Hg). The source of electrons is an 8-Mev microtron [K. A. Belovintsev, A. Ya. Belyak, A. M. Gromov, Ye. M. Moroz, P. A. Cherenkov, "Atomnaya Energiya, 14, 359 (1963)]. Finally as shown by tests conducted on electron storage in a synchrotron, it is possible to carry out simultaneous storage of both electrons and positrons in quantities sufficient for setting up experiments on colliding beams if the pressure in the vacuum chamber is lowered to  $10^{-8}$  mm/Hg and the conditions for particle capture are suitably improved. Orig. art. has 4 figures.

Card 3/4

SKORIK, V. I.

Skorik, V. I. "Changes in arterial blood pressure in functional disorders of the conditioned-reflex exteroceptive and interoceptive connections." Acad Sci USSR. Inst of Physiology imeni I. P. Pavlov. Laboratory of Cortical-Visceral Pathology. Leningrad, 1956. (Dissertation for the Degree of Candidate in Medical Science)

So: Knizhnaya letopis', No. 27, 1956. Moscow. Pages 94-109; 111.

SKORIK, V.I.

Changes in arterial blood pressure during functional disorders  
in conditioned extero- and interoceptive reflex connections. Trudy  
Inst. fiziol. 7:504-512 '58. (MIRA 12:3)

1. Laboratoriya kortiko-vistseral'noy patologii (zav. - I.T. Kurtsin)  
Instituta fiziologii im. I.P. Pavlova AN SSSR.  
(BLOOD PRESSURE) (CONDITIONED RESPONSE)

SKORIK, V.I.; ROMANOV, S.N.

Changes in the intra-vitam staining capacity of animal tissues following whole-body X irradiation. TSitolotia 2 no.6:710-716 N-D '60. (MIRA 13:12)

1. Otdel gigiyeny atmosfery vozdukha Instituta radiatsionnoy gigiyeny Ministerstva zdravookhraneniya RSFSR i Laboratoriya obshchey nervno-myshechnoy fiziologii Instituta fiziologii AN SSSR, Leningrad.

(X RAYS--PHYSIOLOGICAL EFFECT)  
(ABSORPTION (PHYSIOLOGY))

SKORIK, V.I.; KOCHETYGOV, N.I.; KONSTANTINOV, V.A.; FENSTER, G.S.;  
PENCHUK, V.M. (Leningrad)

Model of burn emaciation in laboratory animals. Pat. fiziol. i  
eksp. terap. 5 no.6:64-65 N-D '61. (MIRA 15:4)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova:  
(BURNS AND SCALDS)

BAI YUZEK, F.V.; BURMISTROV, M.I.; DZUTSOV, N.K.; YERMILOV, H.I.; KARIMOVA,  
T.V.; SKORIK, V.I.; UVAROV, B.S.; SHANIH, Yu N.; SHAMARINA, T.N.

Artificial circulation in surgery of the heart and large vessels.  
Grud.khir. no.4:33-39 J1-Ag '62. (MIRA 15:10)

1. Iz kliniki khirurgii usovershenstvovaniya vrachey No. 1 (nach. -  
deystvitel'nyy chlen AMN SSSR prof. N.A.Kupriyanov) Vcyenno-  
meditsinskoy akademii imeni S.M.Kirova. Adres avtorov: Leningrad,  
K-9, pr. K.Marksa, d. 5/20 Khirurgicheskaya klinika dlya  
usovershenstvovaniya vrachey No. 1.

(HEART—SURGERY)  
(PERFUSION PUMP (HEART))

GUBLER, Ye.V.; PINCHUK, V.M.; SKORIK, V.I. (Leningrad)

Characteristics of the reactivity and resistance to additional influences in different periods of burn disease. Pat. fiziol. i eksp. terap. 6 no.1:77-82 Ja-F '62. (MIRA 15:3)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni Kirova.

(BURNS AND SCALDS)

KUPRIYANOV, P.A., prof.; KRUNKO, I.L., prof.; Balyuzek, F.V., GLEBOV,  
Yu.I., SKORIK, V.I.; FARSHATOV, M.N.; YUR'EV, Yu.N.

Use of the artificial circulation method in traumatology. Vest.  
khir. 89 no.8:3-8 Ag '62. (MIRA 15:10)

1. Iz 1-y khirurgicheskoy kliniki usovershenstvovaniya vrachey  
(nach. - prof. P.A.Kupriyanov) i kliniki travmatologii i ortopedii  
(nach. - prof. I.L.Krupko) Voenno-meditsinskoy ordena Lenina  
akademii im. S.M.Kirova. 2.Deystvitel'nyy chlen AMN SSSR (for  
P.A.Kupriyanov). Adres avtorov: Leningrad, pr. Karla Marksa, d.  
5/20, 1-ya khirurgicheskaya klinika usovershenstvovaniya vrachey.  
(BLOOD--CIRCULATION ARTIFICIAL)  
(TRAUMATISM)



BALLYUZEK, F.V. (Leningrad, D-25, ul. Mayakovskogo, d.10,kv.4); ANICHKOV,  
M.N.; PISAREV, Yu.F.; SKORIK, V.I.

Artificial blood circulation in surgery on the initial segments  
of the aorta. Grud.khir. 5 no.12;8-25 Ja-F'63. (MIRA 16;7)

1. Iz khirurgicheskoy kliniki dlya usovershenstvovaniya vrachey no.1  
(nachal'nik deystvitel'nyy chlen AMN SSSR prof. P.A.Kupriyanov)  
Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.  
(BLOOD---CIRCULATION, ARTIFICIAL) (AORTA---SURGERY)

SKORIK, V.I. (Leningrad, ul. Rubinshteyna, d.11, kv.41)

Scoops for selective hypothermia and warming of the heart in  
artificial blood circulation. Grudn. khir. 5 no.3:103-104  
My-Je'63 (MIRA 17:1)

1. Iz nauchno-issledovatel'skoy laboratorii iskusstvennogo  
krovoobrashcheniya pri klinike khirurgii usovershenstvovaniya  
vrachey No.1( nachal'nik - deystvitel'nyy chlen AMN SSSR prof.  
P.A. Kupriyanov [deceased]) Voenno-meditsinskoy ordena Lenina  
akademii imeni S.M. Kirova, Leningrad.

ANICHKOV, M.N., doktor med.nauk (Leningrad, Mokhovaya ul., d.28, kv.26);  
BALYUZEK, F.B.; PISAREV, Yu.F.; SKORIK, V.I.

Aortoplasty in coarctation. Vest.khir.90 no.2:41-44 F'63.  
(MIRA 16:7)

1. Iz 1-y khirurgicheskoy kliniki usovershenstvovaniya vrachey  
(nachal'nik - prof. P.A.Kupriyanov) Voenno-meditsinskoy ordena  
Lenina akademii imeni Kirova.  
(AORTA--DISEASES) (SURGERY, PLASTIC)

SKORIK, V.I.; BALLYUZAK, F.V.; DZUTSOV, N.K.; KARIMOVA, T.V.

Some characteristics of artificial blood circulation. Pat. fiziol.  
i eksp. terap. no.2:39-45 '64. (MIRA 17:9)

1. Nauchno-issledovatel'skaya laboratoriya iskusstvennogo krovoobra-  
shcheniya pri klinike khirurgii usovershenstvovaniya vrachey No.1  
(nachal'nik - deystvitel'nyy chlen AMN SSSR prof. P. A. Kupriyanov  
[deceased]) Voenno-meditsinskoy ordena Lenina akademii imeni  
Kirova, Leningrad.

BALLYUZEK, F.V., doktor med. nauk; SKORIK, V.I., kandi. med. nauk; GORACHEVSKIY, A.M.; KYENITSKIY, G.R.

Technical equipment for regional perfusion of the extremities.  
Ortop. travm. i protez. 26 no.6:7-12 Je '65. (MIRA 18:8)

1. Iz khirurgicheskoy kliniki usovershenstvovaniya vrachey No.1  
(nachal'nik - prof. A.P. Kolesov) Voenno-meditsinskoy ordona  
Lenina akademii imeni Kirova i Spetsial'nogo konstruktorskogo  
byuro ob'yedineniya "Krasnogvardeyets" (nachal'nik - I.Ya. Gurevich).  
Adres avtorov: Leningrad F-13 Fontanka, d.106, Khirurgicheskaya  
klinika usovershenstvovaniya vrachey No.1 Voenno-meditsinskoy  
akademii imeni Kirova.

SIDOROV, Ye.A.; SHERIK, V.K.

Automation of some operations in testing electrical machines.  
Sbor. st. RIIZHT no.45:77-81 '64. (MIRA 19:1)

SKORNI, Ye.T., Radio Techn Sci -- (diss) "Use of the Hall effect in semiconductors for the conversion of power in an electromagnetic field." Kiev, 1958, 12 pp (Min of Higher Education USSR. Kiev Order of Lenin Polytechnic Inst. Chair of Theoretical bases of radio engineering) 100 copies. ~~XXXXXXXXXXXX~~ (FL, 27-58, 112)

- 115 -

SOV/142-56-4-2/30

AUTHOR: Skorik, Ye.T.

TITLE: Analysis of a Wattmeter with a Cavity Resonator that uses the Hall Effect in Semi-Conductors (Analiz raboty wattmetra s obyemnym rezonatorom, ispol'zuyushchego efekt Kholla v poluprovodnikakh)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy- Radiotekhnika, 1958, Nr 4, pp 393-401 (USSR)

ABSTRACT: The paper analyzes a semi-conductor super high frequency power measuring unit, utilizing the Hall effect. It is shown that the use of a cavity resonator can increase the sensitivity of the device, reduce the power consumption and remove distortion. The author first describes the Hall effect and 2 methods, quoted in current literature, of checking the wattmeter. On the basis of an analysis of the function and construction elements, the author compares these two constructions according to their sensitivity and power consumption. First the errors and currents in the resonator were

Card 1/4



SOV/142-58-4-2/30

Analysis of a Wattmeter with a Cavity Resonator that uses the Hall Effect in Semi-Conductors

examined, and the conditions elucidated for balance. By determining  $\lambda_w$  (wave length in the hollow conductor),  $K_1$  (a linear coefficient that characterizes the connection between the resonator and the hollow conductor), and  $Q$  (the quality of the system), one can determine, by the formula:

$$K_N = A \sqrt{K_1 Q} \quad \text{where} \quad A = \frac{1}{\sqrt{\pi}} \cdot \frac{\lambda_0}{\lambda_w}$$

to what extent the magnetic field on the crystal in the resonator, is greater than the magnetic field in the hollow conductor. The author analyzes the connection and determines the equivalent resonator losses. These losses can be analytically ascertained, on the primary assumption that the resonator losses are determined only through similar conductive capacity of the resonator walls. Since the real extent of the losses often deviates considerably from those analytically calculated, it seems expedient to determine the equivalent resistance of the losses from the quality of the resonator when working under actual conditions. Finally the

Card 2/4

SOV/142-58-4-2/30  
Analysis of a Wattmeter with a Cavity Resonator that uses the Hall  
Effect in Semi-Conductors

author states that the relations and curves mentioned in the paper, allowed the intensity of the magnetic field to be determined, with the help of the resonator. Increasing the Hall emf transmitter's sensitivity to the magnetic field permits one to reduce the wattmeter's power consumption and mismatch the transmission line by reducing the electric coupling of the transmitter with the hollow conductor. The analysis shows that the use of cavity resonators when constructing semi-conductor wattmeters which use the Hall effect, considerably increases the device's sensitivity and reduces the proper consumption. The defects of this design are, apparently, its narrow band width and the need to pre-tune it to the working frequency. There are 5 diagrams, 1 graph and 6 references, 4 of which are Soviet and 2 English.

ASSOCIATION: Kafedra teoreticheskikh osnov radiotekhniki Kiyevskogo  
ordena Lenina politekhnicheskogo instituta (Chair  
Card 3/4 for the Theoretical Bases of Radio Engineering, Kiyev)

SOV/142-58-4-2/30  
Analysis of a Wattmeter with a Cavity Resonator that uses the Hall  
Effect in Semi-Conductors

Order of Lenin Polytechnical Institute)

SUBMITTED: December 4, 1957 (initially)  
and February 3, 1958 (after revision)

Card 4/4

9(4) 9,4000  
9,4300

67855  
SOV/142-2-5-10/19

AUTHOR: Skorik, Ye.T.

TITLE: On the Problem of Similarity of Devices, Based on the  
Faraday and Hall Effects ✓

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika,  
1959, Vol 2, Nr 5, pp 619 - 621 (USSR)

ABSTRACT: The author reviews information available in technical literature to establish the analogy and differences between groups of ferrite and semiconductor devices based on the Faraday and the Hall effects. Using the Hall effect, various devices may be designed which will work in the range of low to superhigh frequencies. These devices will be similar in their properties and purpose to shf devices based on the Faraday effect. The reversible and irreversible properties of ferrites are of special interest for shf devices. The author mentions gyrator circuits of A.K. Stolyarov /Ref 37 and others. He describes briefly a Hall e.m.f. trans- ✓

Card 1/3

67855  
SOV/142-2-5-10/19

On the Problem of Similarity of Devices, Based on the Faraday and Hall Effects

ducer. Plane equivalent circuits should not be used for representing and analyzing devices based on Faraday or Hall effects. The Hall e.m.f. transducer is a new electrical circuit element and its equivalent circuit has not yet been completely developed. According to V.P. Zhuze, A.R. Regel' /Ref 4/ and V.N. Bogomolov /Ref 57, the Hall effect may be used for designing linear and square-law detectors, amplifiers and oscillators. Devices based on the Faraday effect show hardly any noises, while noises must be taken into consideration in devices based on the Hall effect. The publication of this article was recommended by the Kafedra teoreticheskikh osnov radiotekhniki (Department of Theoretical Principles of Radio Engineering) of the Kiyevskiy ordena Lenina politekhnicheskii institut (Kiyev - Order of Lenin - Polytechnical Institute). There are 3 sets of diagrams and 6 re-

Card 2/3

6485  
SOV/142-2-5-10/19

On the Problem of Similarity of Devices, Based on the Faraday  
and Hall Effects

ferences, of which 4 are Soviet and 2 English.

SUBMITTED: February 27, 1959

Card 3/3

82908

S/120/60/000/02/039/052


E041/E421

24.7700

AUTHORS: Sidyakin, V.G. and Skorik, Ye.T.

TITLE: Measurement of the Active Resistance of Semiconductors <sup>11</sup>  
at High Frequency

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, Nr 2,  
pp 141-143 (USSR)

ABSTRACT: It is shown how the 200 Mc/s Q-meter type UK-1 can be used to measure the real component of impedance of semiconductor materials.<sup>16</sup> Two precautions are taken: 1. the instrument is switched on for 2 to 3 hours before use; 2. the multiplier of the Q-meter itself does not change position. A substitution method is used whereby the introduction of the sample into a tuned circuit mounted on the Q-meter is compensated for by a readjustment of the tuning capacitor and the new value of Q is noted. Equations (1) to (3') refer to the case of series introduction. In practice, parallel connection to a special sample-holder is preferred and the formula for equivalent shunt resistance is Eq (4). Measurements have been made on selenium, both pure (curve 1) and contaminated with 

Card 1/2

82908  
S/120/60/000/02/039/052  
EO41/E421

Measurement of the Active Resistance of Semiconductors at High Frequency

chlorine (curve 2), with the results shown in Fig 3.  
The results agree with those reported in Ref 7.  
There are 3 figures and 8 references, 6 of which are  
Soviet and 2 English.

ASSOCIATION: Kiyevskiy politekhnicheskii institut  
(Kiyev Polytechnical Institute)

SUBMITTED: January 25, 1959

4

Card 2/2



POLULYAKH, Konstantin Stepanovich: LEYKIN, A.Ya., retsenzent; SKORIK, Ye.T., retsenzent; SHVETSKIIY, B.I., retsenzent; TSARENKO, V.T.,  
otv. red.; TRET'YAKOVA, A.N., red.; ALEKSANDROVA, G.P., tekhn.  
red.

[Electronic resonance measuring devices] Elektronnye rezonansnye  
izmeritel'nye pribory. Khar'kov, Izd-vo Khar'kovskogo gos. univ.  
im.A.M.Gor'kogo, 1961. 138 p. (MIRA 14:12)  
(Electronic measurements) (Radio measurements)

31992  
S/142/61/004/004/013/018  
E192/E382

9,3273 (1040, 1159)

AUTHORS: Skorik, Ye.T. and Molyavko, M.A.

TITLE: A possibility of shifting the frequency of oscillations

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v. 4, no. 4, 1961, 486 - 488

TEXT: Modulator devices producing frequency-shift or spectrum-shift of a signal are comparatively new systems. Such modulators, based on linear ferrites or mechanical devices, can be used at UHF. The authors investigated the phase-shift method developed in Ref. 6 (B.B. Shteyn and N.A. Chernyak - Single Sideband modulation by means of phase circuits, Svyaz'izdat, 1959). The method was used to design a UHF modulator operating at centimetre waves. The modulator is based on the waveguide junction shown in Fig. 1. The symmetrical arms, 1, 2, 3 and 4, of this junction contain crystal diodes which change sinusoidally the reflection coefficient of a given arm when a low-frequency voltage signal is applied to them. The waves reflected from the diodes excite waves in the output

Card 1/4<sub>2</sub>

31992  
S/142/61/004/004/013/018  
E192/E382

A possibility of ....

waveguide of the system. The input wave is polarized in such a manner that its energy is equally divided between all the symmetrical arms. A condition of ideal operation of the system is that the output waveguide should receive the waves with a suitable relationship between the phases and amplitudes. This is achieved by placing the diodes (as shown in the figure) in relation to the axis of the junction and by adjusting the phase of the modulating signal. The modulation system, where the diodes are supplied from two generators and where the depth of modulation can be adjusted independently, is shown in Fig. 2; the diodes are matched in pairs. The idea of Fig. 1 was employed to construct a practical modulator, in which the main waveguide was cylindrical and where a circularly polarized  $H_{11}$  wave was propagating. The modulator is comparatively complex but it permits attainment of comparatively large frequency shifts and has a wide bandwidth.

Card 3/13

BORKINSKAYA, Aleksandra Akimovna, kand. tekhn. nauk, dots.; SKORIK, \_\_\_\_\_  
Yevgeniy Timofeyevich, kand. tekhn.nauk; OGIYEVSKIY, V.V.,  
prof., red.; DUBENETSKIY, V.G., inzh., retsenzent; KOVAL'CHUK,  
A.V., inzh., red. izd-va; STARODUB, T.A., tekhn. red.

[Power measurement techniques at super-high frequencies] Metody  
izmereniia moshchnosti v diapazone sverkhvysokikh chastot. Pod  
red. V.V.Ogievskogo. Kiev. Gostekhzdat USSR, 1962. 170 p.

(MIRA 15:12)

(Electronic measurements) (Microwave measurements)

5A 0111 61 7

AUTHORS: Voronkov, M. G., Skorik, Yu. I. (2-1-27/29)

TITLE: Letters to the Editor (Pis'ma redaktoru). Tris (Trialkylsilyl) Phosphites (Tris (trialkilsilil) fosfity)

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1958, Nr 1, p 119 (USSR)

ABSTRACT: The silicon-organic esters of the oxvacids of the 5-valent phosphor have already been investigated to a great extent. However, the corresponding derivatives of trivalent phosphorus almost not at all. The authors of this letter published two methods of the synthesis of compounds of this kind. The first is based upon the reaction  $PBr_3$  with trialkyloxysilanes:  $3 R_3SiOR' + PBr_3 \rightarrow (R_3SiO)_3P + 3 R'Br$ . The second is based upon the fission of the hexaalkyldisilyloxanes in presence of the above mentioned catalysts:  $3 R_3SiOSiR_3 + PX_3 \rightarrow (3R_3SiO)_3P + 3R_3SiX$ . In  $PBr_3$  the yield of tris (trialkylsilyl)-phosphites amounts to 25-30%. Both reactions, the physical and chemical properties of the trialkylsilylphosphites as well as their oscillation spectra will soon be discussed in detail in this periodical.

Card 1/1

ASSOCIATION: Institute of Silicate Chemistry, AS USSR (Institut khimii silikatov Akademii nauk SSSR)

SUBMITTED: October 24, 1957

1. Phosphorus-Derivatives 2. Silicon compounds (Organic)-Synthesis  
3. Esters-Synthesis

SKORIK, Yu. I.

AUTHORS: Voronkov, M. G., Skorik, Yu. I. 62-58-4-20/32

TITLE: Synthesis of Trialcyl Vanadates and Trialcyl Antimonites (Sintez trialkilvanadatov i trialkilantimonitov)

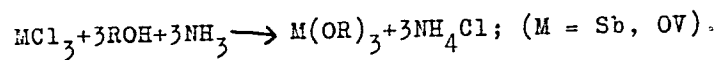
PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk, 1958, Nr 4, pp. 503-503 (USSR)

ABSTRACT: Remarks in technical literature that  $OV(OR)_3$  and  $Sb(OR)_3$  can be synthesized with alcohol by interaction with  $V_2O_5$  ( $Sb_2O_3$  respectively) did not furnish satisfactory results in experiments. In boiling  $V_2O_5$  (or  $Sb_2O_3$ ) with ethyl- or butylalcohols which was to guarantee the removal of the water forming in the reaction, no trialcyl antimonites formed and the yields were very small. In the reaction of  $VOCl_3$  ( $SbCl_3$  respectively) with alcohols in the presence of ammonia the authors easily managed the synthesis of trialcyl antimonites according to the scheme:

Card 1/2

Synthesis of Trialkyl Vanadates and Trialkyl  
Antimonites

62-58-4-20/32



Thus the authors synthesized: ethyl- and n.butylor-  
thoesters of vanadic acid, antimonie acid and phos-  
phoric acid.

There are 8 references, 3 of which are Soviet.

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR  
(Institute for the Chemistry of Silicates, AS USSR)

SUBMITTED: November 10, 1957

AVAILABLE: Library of Congress

1. Trialkyl vanadates—Synthesis
2. Trialkyl antimonites  
—Synthesis

Card 2/2

ACCESSION NR: AP3000130

S/0062/63/000/005/0932/0934

AUTHOR: Skorik, Yu. I.; Gileva, K. G.; Kukharskaya, E. V.; Fedoseyev, A. D.

TITLE: Increasing the number of surface triple-bond Si single-bond OH groups in lamellar silicate

SOURCE: AN SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 5, 1963, 932-934

TOPIC TAGS: chrysotile, serpentine asbestos, acid hydroxyl groups, kaolin, ultrasound irradiation

ABSTRACT: The surface of natural chrysotile (serpentine asbestos) contains a significant amount of acid hydroxyl groups (approximately 1.3%) bound to the Si atoms. The number of -OH groups can be increased by pulverizing the silicate ultrasonically in an aqueous medium (about 2% -OH in 1/2 hour). The method of analysis for free H atom which was proposed by Terents'yev and Kireyeva (Izv. AN SSSR, Otd. khim. n. 1951, 172) was used for the quantitative determination of the triple-bond Si single-bond OH group on the surface of the silicate. The -OH in kaolin was similarly increased by ultrasound irradiation from about 0.6 to 1.8%. Orig. art. has: 1 table.

Card 1/2



ACCESSION NR: AP3000130

ASSOCIATION: Institut khimii silikatov im. I. V. Grebenshchikova Akademii nauk  
SSSR (Institute of Silicate Chemistry, Academy of Sciences SSSR)

SUBMITTED: 12Dec62

DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: CH

NO REF SOV: 003

OTHER: 008

Card 2/2

VORONKOV, N.G.; SKORIK, Yu.I.

Methylphenyldifluorosilane. Zhur.ob.khim. 33 no.10:3450 0  
'63. (MIRA 16:11)

KUKHARSKAYA, E.V.; SKORIK, Yu.I.; BOYKO, N.G.

Organic derivatives of kaolin. Dokl. AN SSSR 148 no.2:350-352  
Ja '63. (MIRA 16:2)

1. Institut khimii silikatov AN SSSR. Predstavleno akademikom  
I.V. Tananayevym.  
(Kaolin)

ACCESSION NR: AP4009526

S/0072/64/000/001/0013/0016

AUTHORS: Dubrovo, S.K.; Skorik, Yu. I.

TITLE: The effect of the chemical treatment of glass surface on the glass properties

SOURCE: Steklo i keramika, no. 1, 1964, 13-16

TOPIC TAGS: glass, coated glass, glass properties, hydrophobicity, organosilicon compound, hydrofluoric acid, dimethyl dichlorosilane

ABSTRACT: Glass surfaces were treated with organosilicons to determine its effect on the properties of glass, such as its hydrophobic nature, mechanical and flexural strength, abrasion strength, and resistance to chemicals. The mechanical and flexural strength of both igneo-polished glass and glass preliminarily hardened with hydrofluoric acid was not appreciably affected by an organosilicon coating. By treating glass with 3% dimethyl dichlorosilane at room temperature and subsequently drying it at 120 C, a sufficient degree of hydrophobicity was imparted so that it will remain

Card 1/2

ACCESSION NR: AP4009526

unchanged during storage. Heating up to 550 C destroys the organo-silicon film. Abrasion tests using sand flow on a glass surface showed that glass hardened in hydrofluoric acid loses its mechanical strength. Samples treated at room temperature with a dimethyl dichlorosilane solution have 1.5 times higher strength than the untreated samples. The testing process and device are described. Orig. art. has 4 tables.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 03Feb64

ENCL: 00

SUB CODE: MA, CH

NO REF SOV: 005

OTHER: 001

Card 2/2

L 6940-65 EWT(m)/EPF(c)/EPR/EWP(j) Pc-4/Pr-4/Ps-4 RPL WW/RM  
 ACCESSION NR: AP4042871 S/0062/64/000/007/1215/1221

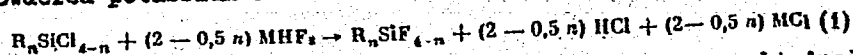
AUTHOR: Voronkov, M. G.; Skorik, Yu. I.

TITLE: Synthesis of organofluorosilanes

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 7, 1964, 1215-1221

TOPIC TAGS: organofluorosilane, synthesis, fluorolysis, ammonium bifluoride, potassium bifluoride, alkylfluorosilane, cycloalkylfluorosilane, arylalkylfluorosilane, trialkylchlorosilane

ABSTRACT: A direct and inexpensive method was worked out for the synthesis of organofluorosilanes based on reaction of the corresponding organochlorosilane with anhydrous powdered potassium or ammonium bifluoride:



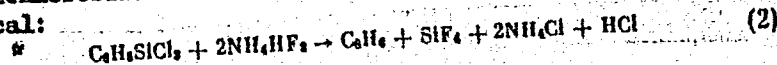
The following alkyl, cycloalkyl and arylalkylfluorosilanes were obtained in 80-90% yields: trimethyl(ethyl or n-propyl)fluorosilanes, diethyl(dipropyl or methylphenyl)difluorosilanes, propyl(n-butyl, amyl, heptyl or cyclohexyl)trifluorosilanes and ethyldiisopropylfluorosilane, methylcyclohexyldifluorosilane and ethylcyclo-

Card 1/3

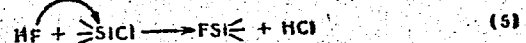
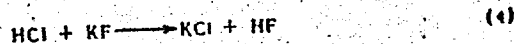
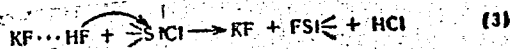
L 6940-63

ACCESSION NR: AP4042871

hexyldifluorosilane. The last three compounds are new in the literature. Reaction of phenyltrichlorosilane according to this method resulted in the cleavage of the phenyl radical:



The presence of 1 or 2 alkyl radicals on the Si in addition to the phenyl radical prevented such rupture. The following mechanism was proposed for these reactions:

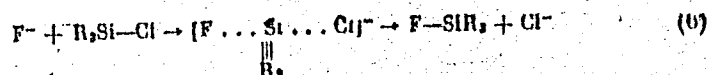


Trialkylchlorosilanes may be converted to the corresponding fluoroderivatives in 50-60% yield by reaction with saturated aqueous solutions of ammonium or potassium fluoride or bifluoride:

Card 2/3

L 6940-65

ACCESSION NR: AP4042871



A method was also worked out for the synthesis of trialkylchlorosilane by reacting the corresponding trialkylsilanes with  $TiCl_4$  or  $SnCl_4$ . Orig. art. has: 2 tables, 6 equations, and 2 formulas.

ASSOCIATION: Institut khimii silikatov im. I. V. Grebenshchikova Akademii nauk SSSR (Institute of Silicate Chemistry, Academy of Sciences, SSSR); Institut organicheskogo sinteza Akademii nauk LatvSSR (Institute of Organic Synthesis, Academy of Sciences, LatvSSR)

SUBMITTED: 13Dec62

ENCL: 00

SUB CODE: 00

NO REF SOV: 008

OTHER: 030

Card 3/3



KUKHARSKAYA, E. V.; SKORIK, Yu.I.

Cleavage of organosiloxanes with thionyl chloride during  
ultraviolet irradiation. ~~Zhur.~~ ob. Khim. 34 no.6:2092-2093  
Je '64. (MIRA 17:7)  
1. Institut khimii silikatov imeni I. V. Grebenshchikova AN SSSR.

L 19699-65 EWT(m)/EPF(c)/EWP(j)/EWP(k) Pc-4/Pr-4 AEDC(a)/ASD(f)-3/ASD(m)-3/  
ASD(p)-3 RM

ACCESSION NR: AP4049487

S/0020/64/159/002/0369/0372

AUTHOR: Kukharskaya, E. V.; Skorik, Yu. I.

TITLE: Effect of thionyl chloride on the siloxane bond in ultrasound

SOURCE: AN SSSR. Doklady, v. 159, no. 2, 1964, 369-372

TOPIC TAGS: thionyl chloride, chlorination, ultrasound, cavitation, organosiloxane, siloxane bond rupture, hexamethyldisiloxane, hexamethyldisiloxane, chlorotriethylsilane, chlorotrimethylsilane, chrysotile asbestos

ABSTRACT: Reactions of  $\text{SOCl}_2$  with hexamethylsiloxane, <sup>1</sup>hexaethylsiloxane, and chrysotile asbestos were studied in a 20-kc ultrasonic field. <sup>15</sup> These reactions were found to be analogous to reactions due to UV irradiation. Organosiloxane —  $\text{SOCl}_2$  mixtures (2:7 molar ratio) yielded, after 2 hr of ultrasound treatment, 27.5% chlorotrimethylsilane and 2% chloroethylsilane, respectively. The reaction with chrysotile asbestos (during 1 hr) resulted in an increase of 0.4% Cl. These reactions show that it is possible to effect rupture of the siloxane bond ( $\text{Si-O-Si}$ ) in organosiloxanes and silicates without the use

Card 1/3

L 19699-65

ACCESSION NR: AP4049487

of a catalyst. Calculations of bond-rupture energies for Si—O and Si—Cl indicate that it is a predominantly homolytic process, although the parallel formation of ions is not excluded. Ultrasonic cavitation in  $\text{SOCl}_2$ -organosiloxane mixtures favors the gaseous-phase interaction of reagents with the activation of molecules in cavitation bubbles, leading to the rupture of siloxane bonds in  $\text{R}_3\text{SiOSiR}_3$  molecules by Cl radicals. The gaseous phase reactions are confirmed by the low yield of chlorotriethylsilane from the interaction of  $\text{SOCl}_2$  with hexaethyldisiloxane (b.p. 231°C). The chrysotile— $\text{SOCl}_2$  reaction reveals an ultrasonic-cavitation activation mechanism at the inter-phase, leading to a point deformation on the surface of the silicate crystal. The activation is due to a shock wave ensuing from the bursting of a cavitation bubble. Mechanical deformations result in the rupture of chemical bonds ( $\text{Si—O—Si}$ , or  $\text{Si—O—Mg—}$ ) yielding radicals and ions. Chlorine atoms combine there with the surface ( $\text{SiCl}$ ). Chlorination of asbestos with  $\text{SOCl}_2$  in an ultrasonic field is much higher in 1 hr than the photochemical chlorination during 16 hr, which fact indicates that mechanical deformations on the crystal surface are the determining factor in the process. Chlorination of

Card 2/3

L 19699-65  
ACCESSION NR: AP4049487

asbestos increases with the growth of surface development, i.e., it is high for loose fibers.

ASSOCIATION: Institut khimii silicatos im. I. V. Grebenshchikova  
Akademii nauk SSSR (Institute of Silicate Chemistry, Academy of  
Sciences, SSSR)

SUBMITTED: 14May64

ENCL: 00

SUB CODE: OC, MT

NO REF SOV: 010

OTHER: 005

ATD PRESS: 3160

Card 3/3